

Application No. 10/630,063

**Amendments to the Claims:**

**Listing of Claims:**

1.(ORIGINAL) A method for locating select multi-color images on a belt after an image on paper registration process, comprising:

generating a test pattern;

printing a test pattern;

measuring at least one test pattern parameter;

using the at least one test pattern parameter to determine a lateral distance required to shift a first registration mark having a first color ~~an image~~ to a desired location on the belt;

shifting the first registration mark ~~the image~~ to the desired location on the belt, and  
using the lateral distance determined for the first registration mark to shift the placement of a  
second registration mark having a second color different from the first color on the belt,  
wherein the first registration mark and the second registration mark are used to locate  
a first color separation of the image and a second color separation of the image on the belt.

2.(ORIGINAL) The method of claim 1, wherein the at least one test pattern error includes a lateral magnification error and a lateral positional error.

3.(CURRENTLY AMENDED) The method of claim 1, wherein the step of shifting the first registration mark ~~the image~~ to the desired location is done during at the gross registration phase, or at the expanded chevron phase (if expanded chevrons are used), and at the standard chevron phase of image on image setup, or any combination of the three phases.

4.(CURRENTLY AMENDED) The method of claim 1, further comprising detecting at the residual error in the lateral location of the first registration mark ~~the image~~ after an image on image registration setup;

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using the residual error in conjunction with the at least one test pattern parameter to determine the lateral distance required to shift the first registration mark ~~an image~~ to a desired location on the belt.

5. (CANCELED)

6. (CURRENTLY AMENDED) The method of **claim 4**, wherein the method is used to shift ~~both an inboard and an outboard~~ registration mark of the first ~~reference~~ color with respect to an inboard MOB sensor and ~~an outboard registration mark of the first color with respect to an outboard MOB sensor respectively.~~

7. (CANCELED)

8. (ORIGINAL) The method of **claim 4**, wherein the residual error is set to zero after the method is performed.

9. (CURRENTLY AMENDED) The method of **claim 1**, wherein detecting the residual error in the lateral location of the first registration mark is accomplished by a MOB sensor.

10. (CANCELED)

11. (CANCELED)

12. (CANCELED)

13. (CANCELED)

14. (CANCELED)

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15. (CANCELED) :

16. (CANCELED)

17. (CURRENTLY AMENDED) An IOI registration system, comprising :  
an initial gross registration mode including a plurality of first registration marks imaged on an image bearing surface,

Imaging said first registration marks on said image bearing surface until an initial gross registration is achieved,

~~automatically switching said color registration system to a second registration mode in~~  
which said color registration system automatically images a plurality of second registration marks on said image bearing surface,

wherein the lateral target position of the marks is shifted relative to the MOB sensors in each of the initial and second registration modes based upon the measurement of at least one test pattern parameter and at least one imaging error.

18. (NEW) The method of claim 1, wherein the first color is cyan.

19. (NEW) The method of claim 1, wherein the lateral distance determined for the first registration mark is used to shift the placement of third and fourth registration marks having third and fourth colors respectively on the belt, wherein the third and fourth colors are each different from the first and second colors as well as different from each other.

20. (NEW) The method of claim 19, wherein the third registration mark and the fourth registration mark are used to locate a third color separation of the image and a fourth color separation of the image on the belt.

21. (NEW) The method of claim 20, wherein a composite of the first, second, third, and fourth color separations is simultaneously transferred to a final substrate.